

IN THE CLAIMS:

Please amend the claims as follows.

Claim 1 (Canceled).

Claim 2 (Currently Amended): The radiation detector photodiode array according to Claim [[1]] 10, wherein a plurality of depressions having a predetermined depth are formed in array on the opposite surface side to the incident surface of the light to be detected, in the semiconductor substrate, and

wherein each said photodiode is formed in a bottom portion of the associated depression.

Claim 3 (Currently Amended): The radiation detector photodiode array according to Claim ~~1 or 2~~ 10, wherein the resin film is provided so as to cover the entire incident surface of the light to be detected, in the semiconductor substrate.

Claim 4 (Currently Amended): The radiation detector photodiode array according to Claim [[1]] 10, wherein the semiconductor substrate is provided with an impurity region between the photodiodes adjacent to each other, for separating the photodiodes from each other.

Claim 5 (Currently Amended): The radiation detector photodiode array according to Claim [[1]] 10, wherein a high-impurity-concentration layer of the same conductivity type as the semiconductor substrate is formed on the incident surface side of the light to be detected, in the semiconductor substrate.

Claims 6-9 (Canceled).

Claim 10 (Currently Amended): A radiation detector comprising:
the a photodiode array comprising a semiconductor substrate, as set forth in claim 1; and
wherein a plurality of photodiodes are formed in array on an opposite surface side to an
incident surface of light to be detected, in the semiconductor substrate, and
wherein a resin film for transmitting the light to be detected and for functioning as a
cushion layer is provided so as to cover at least regions corresponding to regions where the
photodiodes are formed, on a side of the incident surface of the light to be detected, in the
semiconductor substrate;
a scintillator panel arranged opposite to the incident surface of the light to be detected, in the photodiode array, and arranged to emit light with incidence of radiation; and
an optical resin provided so as to fill a space between a light exit surface of the
scintillator panel and the resin film.

Claim 11 (Canceled).

Claim 12 (Currently Amended): The radiation detector photodiode array according to
Claim [[1]] 10, wherein a thickness of the resin film is set in a range of 1-50 μm .

Claim 13 (Canceled).

Claim 14 (Currently Amended): The radiation detector photodiode array according to
Claim [[1]] 10, further comprising an anti-reflection film provided on the incident surface of the
light to be detected, in the semiconductor substrate,
wherein the resin film is provided on the anti-reflection film.

Claim 15 (Canceled).